

Abstract

The invention relates to a method and apparatus for regenerating portions of the page that have changed and transmitting only those portions to the client for display. Executing only the necessary parts of the page generation code and transmitting only changes to the client improves the efficiency of using the resources of the network communication channel, the client node and the server node. Performing these operations only when required, when the data has changed, improves the efficiency of use even further. The invention also takes advantage of any portions of the page that are already on the client by reusing them and thus eliminates the need to regenerate or transmit those reusable portions.

In one aspect, the invention relates to a method for partial page regeneration of a transmitted page by a server. The method includes receiving page generation code that generates a page, transmitting the page to a client for display, associating a portion of the transmitted page with a fragment of the page generation code, and executing the associated fragment of the code to regenerate the portion of the transmitted page. In one embodiment, the method includes transmitting the regenerated page portion to the client for incorporation into the transmitted page.